

From the Program Co-Chairs of Hot Chips 19

The Program Committee for Hot Chips 19 welcomes you to the annual Hot Chips symposium. We received 65 submissions, once again maintaining the record pace of the last few years, and once again, substantial discussion was needed to choose papers from the large number of promising candidates.

We have selected papers ranging from interesting research efforts to new commercial products. We have also made a strong effort to encourage “insight” over data sheets, as past attendees have responded well to papers explaining how and why design and implementation decisions were made. We’ve included some chip-related software and evaluation content, since silicon alone is not enough. We hope you will ask many questions, as Hot Chips is a great venue in which to interact with other designers.

Our first tutorial “Approaches to System Design for the Working Engineer” addresses a real issue for many engineers, that of choosing among different kinds of system implementations with varying tradeoffs.

Our second tutorial “Enterprise Power and Cooling: A Chip-to-Data Center Perspective” is a systems-oriented, bottom-to-top discussion that certainly places “hot chips” among the various “hot things” we now have.

As usual, we have high-end microprocessors, embedded and media processors, switch/networking chips, wireless chips, and memory technology. This year, there is a particular emphasis on multi-core chips and the software necessary to make them work well, with multi-core designs for general-purpose CPUs, graphics processors, and several other interesting new designs.

We have an especially diverse mix of panel sessions, keynotes, and a special presentation. These range from near-term product directions and technologies to consideration of much broader issues, and ending with a special presentation on wireless broadband and entrepreneurship. We include these to give us all some broader context for the design, use, and future of chips, not just the low-level bits and bytes.

Hot Chips always tries to offer our attendees fresh technical information on important new chips and relevant technologies to our attendees. Many products and some research efforts are presented, with minimal marketing allowed.

We thank the Program Committee for its hard work. For those new to Hot Chips, you should know that it works somewhat unlike many conferences, and PC members perform somewhat different tasks.

The PC issues the usual Call For Papers, but increases the available pool of presentations to be evaluated by chasing people known to be doing interesting things. Unlike most conferences, Hot Chips presentations are accepted on the basis of abstracts, the proceedings consist of copies of the speakers' slides, not full papers. This process enables all PC members to read all abstracts, and is sufficiently less time-consuming to encourage key working engineers to submit presentations that can be much more up-to-date.

While presentations are conditionally accepted via abstract, slides must be reviewed, sometimes edited, and approved by the session chairs. This process occasionally leads to "interesting" discussions among presenting engineers, marketeers, lawyers, and sessions chairs, especially for products that are just about to be announced.

Finally, the PC selects "Best of Hot Chips" presentations, whose authors are then invited to prepare actual papers for an IEEE Micro issue guest-edited by us. If you particularly like some presentation, let PC members know during the conference.

Of course, the PC is only part of the ever-changing Hot Chips team, many of whom work very hard behind the scenes to offer an interesting experience for all of us. Some of us have had some role or other for nearly 20 years, and it's work, but rewarding work. Get involved!

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Hot Chips 19, August 2007*

